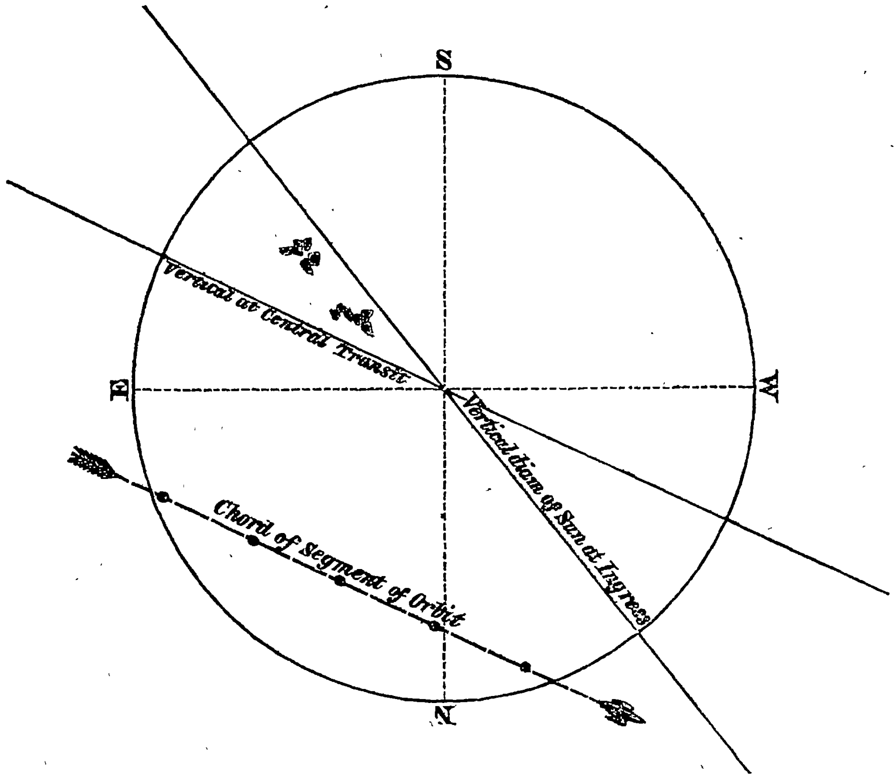
1862MNRAS..22..236.

The afternoon on the whole was favourable, and had it not been for Mount Wellington (4240 feet high) blocking out our western horizon, the whole transit might have been seen, from ingress to egress.


S
E
W
N
Vertical at Central Transit
Vertical diam of Sun at Ingress
Chord of Segment of Orbit

Observed time of ingress for Hobart Town Mean Time.

	h	m	s
Exterior contact.........	3	6	16 P.M.
Centre	3	8	25 ,,
Interior contact	3	9	36 ,,

Hobart Town, Tasmania, Nov. 25, 1861.

Results of Meridional Observations of Small Planets; Occultations of a Star by the Moon; and Phenomena of Jupiter's Satellites; observed at the Royal Observatory, Greenwich, during the month of March, 1862.

(*Communicated by the Astronomer Royal.*)

Flora ⑧.

Mean Solar Time of Observation.		R.A. from Observation.	N.P.D. from Observation.
	h m s	h m s	° ′ ″
1862, Mar. 25	13 57 22·8	14 10 25·49	93 17 42·46

1862MNRAS..22..236.

Metis ⑨.

	Mean Solar Time of Observation.	R.A. from Observation.	N.P.D. from Observation.
	h m s	h m s	° ′ ″
1862, Mar. 4	9 40 33·9	8 30 6·85	62 15 40·00
8	9 23 47·4	8 29 3·77	62 20 57·70
10	9 15 37·0	8 28 45·12	62 24 38·50
12	9 7 34·6	8 28 34·57	62 28 50·88

Eunomia ⑮.

	Mean Solar Time of Observation.	R.A. from Observation.	N.P.D. from Observation.
	h m s	h m s	° ′ ″
1862, Mar. 4	9 16 54·2	8 6 23·29	76 1 7·76
12	8 43 34·1	8 4 30·11	76 6 16·08

Psyche ⑯.

	Mean Solar Time of Observation.	R.A. from Observation.	N.P.D. from Observation.
	h m s	h m s	° ′ ″
1862, Mar. 3	11 22 0·5	10 7 53·58	78 12 20·13
4	11 17 19·9	10 7 8·72	78 7 30·69

Thalia ㉓.

	Mean Solar Time of Observation.	R.A. from Observation.	N.P.D. from Observation.
	h m s	h m s	° ′ ″
1862, Mar. 3	11 50 45·8	10 36 43·55	60 38 39·90
4	11 45 56·7	10 35 50·27	60 36 48·56

Amphitrite ㉙.

	Mean Solar Time of Observation.	R.A. from Observation.	N.P.D. from Observation.
	h m s	h m s	° ′ ″
1862, Mar. 3	13 19 15·0	12 5 27·33	90 15 3·66
25	11 32 37·2	11 45 16·15	88 58 46·20

All the observations of N.P.D. have been corrected for Refraction and Parallax.

March 9. The disappearance of 6 *Geminorum* at the Moon's dark limb was observed by Mr. Criswick to take place at $7^{h}\ 1^{m}\ 40^{s}{\cdot}6$ mean solar time.

1862MNRAS..22..238C

Phenomena of Jupiter's Satellites.

Day of Observation.	Satellite.	Phenomenon.	Mean Solar Time.	Observer.
1862.			h m s	
Mar. 4	III	Ecl. disapp.	14 38 34·5	T. C.
25	I	Egress, first cont.	8 38 41·9	C.
25	I	,, bisection	8 40 11·6	C.
25	I	,, last cont.	8 42 11·3	C.

The initials C. and T. C., are those of Mr. Criswick and Mr. Chappell.

Observations of Encke's Comet, taken with the Equatoreal of the Liverpool Observatory. By J. Hartnup, Esq.

Day.	G.M.T.	Comet's R.A.	Comet's N.P.D.	Stars of Comparison.
	h m s	h m s	° ′ ″	
1861, Dec. 1	7 20 17·0	22 25 2·79	83 21 1·3	ζ Pegasi.
5	7 4 3·9	22 22 32·99	83 57 41·8	,,
21	7 11 28·5	22 18 3·45	85 49 6·7	η Aquarii.
25	6 9 34·7	22 17 47·26	86 11 47·3	,,
28	6 4 37·2	22 17 38·68	86 28 50·7	,,
1862, Jan. 22	6 8 56·6	21 57 27·29	92 32 37·2	θ and η Aquarii.
25	6 8 5·2	21 47 20·09	94 45 10·4	α Aquarii.

The observations are corrected for Refraction and Parallax.

The places of the stars of comparison were taken from the *Nautical Almanac*.

On Lambert's Theorem for Elliptic Motion. By A. Cayley, Esq.

The theorem referred to is that which gives the time of description of an elliptic arc in terms of the radius vectors and the chord. The demonstration given by the author in his "Insigniores Orbitæ Cometarum Proprietates," Augs. 1761, depends upon a series of geometrical propositions of great elegance, which may be thus stated,

Let F Q be a line given in magnitude and position, E a given point on this line, Q f a line given in magnitude only, the position thereof being determined by assigning a value to